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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/380,419	07/24/2000	MAX F. ROTHSCHILD	P03815US1	2593

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EXAMINER

SWITZER, JULIET CAROLINE

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

EXAMINER'S AMENDMENT

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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Heidi Nebel on 9/1/04.

The application has been amended as follows:

On page 4, following the heading BRIEF DESCRIPTION OF THE DRAWINGS, beginning at line 31, please replace all previous descriptions of the drawing with the following:

Figures 1 and 1A are the sequence listing for MC4R in pigs (SEQ ID NO:1). "X" represents the site of the polymorphism.

Figures 2A, 2B and 2C represent a comparison of the DNA sequence between the human (SEQ ID NO:2) and the porcine (SEQ ID NO:3) MC4R gene.

Figures 3A and 3B represent a comparison of the amino acid sequence between the human (SEQ ID NO:4) and the porcine (SEQ ID NO:5) MC4R gene.

Figures 4a, 4b, 4c and 4d are linkage reports for MC4R from CRI-MAP.

Figure 5 depicts partial nucleotide and amino acid sequences (SEQ ID NO:11) of the porcine MC4R gene. The amino acid translation shows an amino acid substitution at codon 298.

Figure 6 is an electrophoresis gel of *TaqI* digestion of the PCR product. Molecular marker (M) and MC4R genotypes are indicated at the top of each lane.

Figure 7 depicts multiple-alignments of the putative seventh transmembrane domain of porcine MC4R with other MCRs and GPCRs. The "*" represents the predicted sequence positions for porcine MC4R. The other amino acid sequences were obtained from the GenBank database (accession numbers P32245 (SEQ ID NO:12), P70596 (SEQ ID NO:13), P41983 (SEQ ID NO:14), P56451 (SEQ ID NO:15), P34974 (SEQ ID NO:16), P41968 (SEQ ID NO:17), P33033 (SEQ ID NO:18), Q01718 (SEQ ID NO:19), Q01726 (SEQ ID NO:20), Q28031 (SEQ ID NO:21), AF011466 (SEQ ID NO:22), P21554 (SEQ ID NO:23), P18089 (SEQ ID NO:24), P30680 (SEQ ID NO:25), P47211 (SEQ ID NO:26). The missense variant in porcine MC4R substituted amino acid N for D in the position marked with an arrow. The Asp (D) residue is highly conserved among MCRs, and the Asn (N) residue is well conserved in most other GPCRs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juliet C Switzer whose telephone number is (571) 272-0753. The examiner can normally be reached on Monday through Friday, from 9:00 AM until 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached by calling (571) 272-0782.

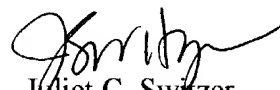
The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-0507.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are

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available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.



Juliet C. Switzer
Examiner
Art Unit 1634

September 1, 2004